

*Hipparchia fagi* Scop./*H. alcyone* Schiff. SL — 800m. July 18-Aug. 30. Widespread.

\**Hipparchia fagi* Scop. Borci, July 24. (Jullien Organ:-5 rods on each side).

\**Hipparchia statilinus* Hufnagel. Metković, Aug. 28.

*Chazara briseis* L. SL — 800m. July 14-Aug. 27. Widespread.  
(to be concluded)

## The Distribution of Insects related to Railway Embankments

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The recent request by the Croydon Natural History Society for old insect records from northern Surrey stimulated me to refer to my earliest entomological notes, which were made during my early "teens". While referring to these notes my mind was full of memories of school days and of "prize" insect specimens taken in a suburban garden.

During my childhood and until I left home in 1962, I lived in a house in Streatham, South London. The garden was always full of flowers and fruit trees of several kinds. Insects were also plentiful and I began recording them in 1950 when my entomological interest began to show itself.

Our garden backed onto the main London—Brighton Railway Line and even then I realised that many of the insects were attracted to our flowers from the grassy railway embankment at the far end of our garden. Nearby gardens, similar to our own but which did not back onto an embankment, possessed far fewer insect species.

It was in the early fifties that I witnessed the arrival and increase in population of the syrphid fly *Volucella zonaria* Poda. There were many present in the summer months, also *V. pellucens* L. and *V. inanis* L. At this time I was not aware that *V. zonaria* had previously been uncommon in England.

In recent years more insect species have been recorded in this garden by my brother A. R. McLeod. Even the number of butterfly species has increased. In 1970, the Speckled Wood *Pararge aegeria* L. and the Small Heath *Coenonympha pamphilus* L. were recorded for the first time. Both of these species occur in colonies some miles distant and are separated from Streatham by uninterrupted built-up areas.

This increase in butterfly species is perhaps connected with a change in the maintenance methods employed by British Railways. Until the early sixties, steam locomotives were still in use and it was usual for the grass to be cut during the summer months and, after drying for a few days, it was burnt under supervision. This process was a reasonable method of preventing accidental fires on the embankment. Fires were, however, frequently caused by hot coals, despite the cutting and burning.

With the advent of diesel locomotives, the frequency of fires on the embankments has been greatly reduced and the supervised cutting and burning of the grass has been delayed until early autumn and sometimes completely abandoned.

The results of this change is the survival, throughout the summer months, of many miles of wild grasses and flowers which can provide refuge, feeding and perhaps even breeding sites for some butterflies (Watson 1969). On the embankment opposite our garden occur Umbellifers, Daisies, Buttercups, Plantains, Vetches and many Crucifers, as well as occasional clumps of nettles and thistles.

Railway embankments with their assortment of wild flowers and grasses are possibly of great importance in the passage of insects from one suitable habitat to another. Agricultural land with its lack of "natural" plants can be as much a barrier to insect dispersal as are built-up areas, especially when hedgerows are treated with herbicides or completely removed.

In recent years, the abandoning by British Railways of many uneconomical lines has resulted in some embankments and tracks reverting to a completely wild state. The use of these as nature trails and of the dramatic increases of insect populations in these areas has been reported in several papers. (eg. Whitehouse 1966).

It is hoped that more local Naturalist Trusts will take advantage of the availability of these disused railways by making them into nature trails for educational purposes and thereby help insect conservation in this country.

The following butterflies were recorded in Streatham, London, S.W. 16. during May — August 1970.

Green Veined White	<i>Pieris napi</i> L.
Small White	<i>P. rapae</i> L.
Large White	<i>P. brassicae</i> L.
Orange Tip	<i>Anthocaris cardamines</i> L.
Speckled Wood	<i>Pararge aegeria</i> L.
Wall Brown	<i>Lassiomata megera</i> L.
Meadow Brown	<i>Maniola jurtina</i> L.
Small Heath	<i>Coenonympha pamphilus</i> L.
Common Blue	<i>Polyommatus icarus</i> Rott.
Small Copper	<i>Lycaena phlaeas</i> L.
Comma	<i>Polygonia c-album</i> L.
Small Tortoiseshell	<i>Aglais urticae</i> L.
Painted Lady	<i>Vanessa cardui</i> L.
Red Admiral	<i>V. atalanta</i> L.
Large Skipper	<i>Ochlodes venatus</i> Brem. & Grey
Small Skipper	<i>Thymelicus sylvestris</i> Poda

It may perhaps be worth recording that the Grizzled Skipper *Pyrgus malvae* L. and the Dingy Skipper *Erynnis tages* L. were once common in this area.

After the war and until the early fifties these two Hesperiiids were common on the London/Surrey border on the

site which is now Norbury Park. Much of this site was divided into allotments during and shortly after the war. These were gradually abandoned and wild grasses and flowers grew waist high in places. Both *O. venatus* and *T. sylvestris* were common, but since the site was levelled and converted to a park, I have not recorded these species in the area.

I consider that the above list of butterfly species is quite remarkable for a south London suburban garden. *Gonopteryx rhamni* L. can also be seen in some years. The number of species listed is undoubtedly related to the presence of the railway embankment.

Railways constitute a huge network throughout the country passing through natural habitats, agricultural land, towns and cities. The railway embankments with their wild plant species can assist insect dispersal by providing passage ways through otherwise "sterile" areas. With an ever increasing human population, our towns, cities and roads spread alarmingly. The importance of railway embankments to our insect life might well be increased. Let us hope that the practice of burning and use of herbicides on railway embankments is kept to a minimum.

#### REFERENCES

- Watson, R. W. 1969. Notes on *Melitaea cinxia* L. 1945-1968. *Ent Rec.* **81**: p 18  
 Whithouse, S. J. 1966. New Habitats *Bull. Amat. Ent Soc.* **25**: p. 41

## New Forest Mercury Vapour Light Records for 1971

By L. W. SIGGS

During 1971, numbers were low in the trap at Minstead, especially in June (a very wet month) and October. Nights were generally cold; the minimum temperature at night never exceeded 16°C (9th July) when the catch was 461 specimens in 90 species.

	Nights	Specimens Total	Average	Species Average
March	23	1423	62	8
April	28	3090	110	10
May	31	1033	33	14
June	30	2285	76	27
July	31	5623	181	53
August	26	5251	202	40
September	29	2339	81	17
October	29	1416	49	13
November	17	351	21	6